

**REMARKS**

In the Office Action of May 18, 2005, claims 1-20 are pending. Claims 9-20 stand allowed. Claim 1 is an independent claim from which claims 2-8 depend therefrom. Applicants recognize the allowability of claims 2 and 7-8 if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. However, Applicants believe that independent claim 1 is allowable in view of the relied upon references referred to in the Office Action and thus also believe that claims 2 and 7-8 are allowable as originally drafted.

Claims 1 and 5-6 stand rejected under 35 U.S.C. 102(b) as being anticipated by Sugimoto et al. (U.S. 6,292,753).

Claim 1 recites the limitations of determining a brake threat number in response to vehicle kinematics and kinematics of an object. A threat of the object is also determined in response to the brake threat number.

The claimed invention determines the threat posed by an object and quantifies that threat via a break threat number. Based on the break threat number it can be determined whether a collision can be avoided by braking. For example, when the break threat number is 100% a collision cannot be avoided simply by braking.

The Office Action states that Sugimoto discloses the stated limitations and refers to col. 6, lines 38-48 of Sugimoto for such reliance. Applicants, respectfully, traverse.

In col. 6, lines 38-48, Sugimoto states that when the degree of risk is exceeded an automatic braking threshold value then the system of Sugimoto starts an automatic braking operation, otherwise the need for carrying out the automatic braking operation has been eliminated. In other words, when the risk of an object is greater than a threshold value the system of Sugimoto applies brake pressure. Nowhere in Sugimoto is it stated that a brake threat number is determined in response to vehicle kinematics and kinematics of an object. The brake threshold value of Sugimoto is not determined in response to vehicle kinematics and object kinematics, but rather is a predetermined or stored risk

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value. When the risk of the object is high enough to be above the brake threshold value then the braking operation is started. The brake threshold value is similar to the warning threshold value mentioned in col. 6, lines 24-27 in that it is merely a stored comparison value used in determining whether to brake based on the level of risk.

In Sugimoto the risk of an object is determined in response to the relative distance and speed of an object. When the risk is greater than the brake threshold value then the brake operation is started. Thus, the risk value is determined in response to the relative distance and the relative speed of the object and not in response to the brake threshold value.

Also, the risk value of Sugimoto is not determined in response to the brake threshold value or vice versa. The risk value is merely compared to the brake threshold value and is determined prior to that comparison. This is unlike the claimed invention in which a threat or, for example, a threat value of the object is determined in response to the brake threat number. The brake threshold value of Sugimoto does not quantify the threat of an object, but rather is merely a threshold value that is used to determine when to begin a braking operation.

In order for a reference to anticipate a claim the reference must teach or suggest each and every element of that claim, see MPEP 2131 and *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628. Thus, since each and every element of claim 1 is not taught or suggested by Sugimoto, Applicants submit that claim 1 is novel, nonobvious, and is in a condition for allowance at least in view of Sugimoto. Also, since claims 5-6 depend from claim 1, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons,

Claims 3 and 4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto in view of Igaki et al. (U.S. Pub. No. 2002/0101337).

Applicants submit that since claims 3 and 4 depend from claim 1 that they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

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Although the Office Action relies solely on Sugimoto for disclosing the limitations of claim 1, Applicants submit that Igaki, like Sugimoto, also fails to teach or suggest the limitations of determining a brake threat number in response to vehicle kinematics and kinematics of an object and determining the threat of the object in response to the brake threat number.

Referring to MPEP 706.02(j) and 2143, to establish a *prima facie* case of obviousness the prior art references must teach or suggest all the claim limitations. Thus, since each and every element of claim 1 is not taught or suggested by Sugimoto and Igaki alone or in combination, Applicants submit that claim 1 is novel, nonobvious, and is in a condition for allowance. Also, since claims 3-4 depend from claim 1, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

In light of the remarks, Applicants submit that all the rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, she is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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Dated: August 16, 2005